

ABSTRACT OF THE DISCLOSURE

A receiving apparatus, a receiving method, and a radio communications system are disclosed. The receiving apparatus is for receiving CDMA signals transmitted by M antennas and received by N antennas, where M and N are positive integers. The receiving apparatus includes a multipath receiving signal demodulating unit for primary demodulation of the CDMA signals received by the receiving antennas to obtain estimated transmission signals, and for obtaining signals in a multipath environment of each path of the receiving antennas based on the estimated results. Further, the receiving apparatus includes a multipath interference canceling unit for deducting signals of the paths other than a target path from the signals received by the receiving antennas to obtain multipath interference cancelled signals. Further, the receiving apparatus includes a demodulator for secondary demodulation of the multipath interference cancelled signals.